



September 3, 2020

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Interstate 405 Improvement Project Update

Overview

The Orange County Transportation Authority is currently underway with the implementation of the Interstate 405 Improvement Project. This report provides a project update.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA), in cooperation with the California Department of Transportation and the cities of Costa Mesa, Fountain Valley, Huntington Beach, Seal Beach, and Westminster, is implementing the Interstate 405 (I-405) Improvement Project between State Route 73 (SR-73) and Interstate 605 (I-605) (Project). The Project will add one general purpose lane in each direction from Euclid Street to I-605, consistent with Measure M2 Project K, and will add an additional lane in each direction that will combine with the existing high-occupancy vehicle lane to provide dual express lanes in each direction of I-405 from SR-73 to I-605, otherwise known as the 405 Express Lanes.

On November 14, 2016, the OCTA Board of Directors (Board) awarded the design-build (DB) contract to OC 405 Partners (OC405), a joint venture. OCTA executed the DB contract with OC405 and issued Notice to Proceed (NTP) No. 1 on January 31, 2017. NTP No. 1 was a limited NTP for mobilization, design, and administrative activities. On July 26, 2017, the Transportation Infrastructure Finance and Innovation Act (TIFIA) loan agreement was executed between OCTA and the United States Department of Transportation (USDOT). On July 27, 2017, OCTA issued NTP No. 2 to OC405. NTP No. 2 was a full NTP for all activities, including construction.

Discussion

A number of activities are ongoing as the construction work continues to advance. The following provides a more detailed status of Project activities.

Financing and TIFIA Loan

On July 26, 2017, OCTA executed a TIFIA loan agreement with the USDOT for up to \$628.93 million. Pursuant to the terms identified in the loan agreement, OCTA staff submits periodic reimbursement requisitions to the USDOT Build America Bureau and Federal Highway Administration. OCTA has received two TIFIA loan disbursements to date and anticipates receiving the third disbursement later this year.

Tolling Contracts

On February 26, 2018, the Board selected Kapsch TrafficCom USA, Inc., (Kapsch) to provide toll lanes system integration services for design, installation, operation, and maintenance of the electronic toll and traffic management (ETTM) system on both the 405 and 91 Express Lanes. Kapsch is currently under contract and is working closely with the design-builder to deliver fully functional express lanes upon opening in 2023. Kapsch has received approval for the ETTM infrastructure final design to be used for the 405 Express Lanes, including equipment types and configurations. Kapsch continues to review the design-builder's plans and construction activities and has provided input on requirements for the Toll Operations Center (TOC) improvements. The TOC will be located at OCTA's Santa Ana Bus Base and will be staffed by Kapsch for 405 Express Lanes operations.

Staff developed a request for proposals for the back-office support and customer service center contract for the 405 Express Lanes, the Board approved its release on June 22, 2020, and proposals are due on October 8, 2020.

Design

The final design is substantially complete at this time. The DB process allows for design refinements, and that process will continue throughout the remainder of construction.

Right-of-Way (ROW) Acquisition

Construction of the Project impacts 288 properties, including 179 residential properties, 71 commercial/industrial properties, 37 public properties, and one railroad property. There are 287 properties identified as partial acquisitions

and one property identified as a full acquisition at the owner's request. The ROW required to construct the Project is comprised of a combination of fee acquisitions, permanent easements, temporary construction easements, permanent and temporary ground lease reductions, and access control rights. This ROW is required for roadway and bridge construction, soundwalls and retaining walls, drainage systems, and for the installation of above ground and underground facilities, including electrical, telecommunication, water, sewer, gas, and storm drain systems.

The ROW acquisition program is on schedule. As of July 2020, OCTA has possession of the required property rights needed for all 288 property impacts, which retires a significant risk to OCTA. The overall ROW process continues as OCTA works with certain property owners to finalize remaining agreements on costs related to certain acquisitions. As this is a DB project, minor additional ROW needs may become necessary in the future as construction continues. Of the 288 total properties impacted, 288 offers were presented and the ROW is in OCTA's possession for construction. There were 60 resolutions of necessity (RONs) approved by the Board and no additional RONs are anticipated at this time.

Utility Relocations

There are currently 129 utilities that require relocation to accommodate the Project. OCTA is coordinating with 22 impacted utility owners to identify and resolve conflicts and relocation issues. To date, OCTA has executed 91 of the 109 utility relocation agreements (over 80 percent) needed for utility relocations, and is in the process of finalizing the remaining utility agreements. There are several remaining potential utility relocation risks, including several Southern California Edison (SCE) transmission facilities for which staff continues to develop and implement mitigation plans, as utilities are a shared risk between OCTA and OC405. Many critical utility relocations that had once been considered to pose some risk, such as facilities owned by Frontier Communications, Chevron USA, Crimson Pipeline, and SCE have been successfully completed. Additionally, a major Southern California Gas line relocation within the Navy property posed a significant risk to the Project schedule; however, the relocation has been successfully completed on schedule.

Construction

OC405 began construction on March 6, 2018. Initial construction activities included restriping portions of the freeway and setting up concrete barriers on the outside of the freeway to protect work areas for activities such as tree removals and grading. These initial construction activities are complete. Clearing and grubbing, including tree and ground cover removal, and rough grading activities are also substantially complete at this time.

Significant roadway construction activities, including installation of drainage systems, retaining walls and soundwalls, and paving operations began in earnest in 2019, and will continue through the end of the Project. Construction at Oceanview Channel, Greenville-Banning Channel, and East Valley Channel, three major drainage facilities that cross under the freeway, is well underway. Additionally, over 70 retaining walls and soundwalls are under construction or complete. Recently, the first soundwalls on the Project were completed.

After the opening of the Slater Avenue overcrossing bridge in late August 2019, demolition and construction activities commenced on Bushard Street and Talbert Avenue. The Bushard Street and Talbert Avenue overcrossing bridge construction is actively progressing, and the bridges are anticipated to be open to traffic in late 2020 and early 2021, respectively. Construction on the McFadden Avenue overcrossing bridge also continues, and the bridge is anticipated to be open to traffic in late September 2020. Recently, the Edwards Street overcrossing bridge was demolished and construction began on the new bridge at this location. Bushard Street, Talbert Avenue, McFadden Avenue, and Edwards Street are all one-stage bridges, which means the bridges are closed to traffic on both sides of I-405 during demolition and reconstruction.

Significant bridge construction also continued at Fairview Road, Magnolia Street, Bolsa Avenue, Goldenwest Street, Westminster Boulevard, and Bolsa Chica Road overcrossings. These are two-stage bridges, which means traffic is being maintained on the remaining portion of the bridge while the first half of the new bridge is constructed. The first half of the new Magnolia Street overcrossing bridge opened in late March, and construction began on the second half of the bridge immediately thereafter. Similarly, the first halves of the new Goldenwest Street and Bolsa Chica Road overcrossing bridges opened this summer, and construction began on the second half of these key bridges. The first halves of the new Fairview Road, Bolsa Avenue, and Westminster Boulevard overcrossing bridges are anticipated to be opened in the next six months.

This past quarter, the widening of existing freeway bridges continued over Harbor Boulevard, Santa Ana River, Beach Boulevard, Bolsa overhead railroad crossing, and an old Navy railroad crossing.

Lastly, the Heil pedestrian overcrossing bridge was recently demolished and a new pedestrian overcrossing is under construction at this location.

Looking ahead, the remainder of 2020 will remain busy related to bridge, wall, and pavement construction.

Project Challenges

As would be expected on a project of this magnitude, certain challenges have been encountered, including the following:

- Oversight and approvals from many different agencies and third parties
- Cost and availability of construction resources in this active construction market
- Dispute resolution and change management
- Minimizing impacts and disruptions to the public
- Timely performance of third-party utility work
- Project schedule impacts and mitigations

OCTA has worked closely with its partners and OC405 to mitigate schedule delays when identified. Schedule mitigations implemented to date include building the Slater Avenue and Edwards Street overcrossing bridges in one stage instead of two stages, improvements to the construction staging at Oceanview Channel, and the long-term closure of one of the two off-ramps from northbound I-405 to Westminster Boulevard. Additional schedule mitigations that have been implemented include extended overnight and daytime freeway lane closures to take advantage of the significantly reduced traffic volumes on the freeway in the spring related to the coronavirus (COVID-19) pandemic. More recently, staff worked with several of the cities involved to expedite construction of several key bridges on the Project. The objectives of the schedule mitigations are to minimize delay impacts to the original Project completion date while balancing the minimization of traffic impacts.

Additionally, in September 2019, there was a discovery of archaeological resources within the Project site. OCTA is following established state procedures for this type of discovery, and is working with the appropriate parties to ensure appropriate and respectful procedures are followed. This discovery impacted construction at a specific location; however, construction has since resumed. A mitigation plan was implemented to reduce the impacts to the overall Project schedule.

Project Cost/Contingency

The overall Project cost remains \$1.9 billion, and the Project contingencies have been approximately 40 percent expended to date. This is in line with the percent complete for the Project from both a time and earned value standpoint.

Public Outreach

Over the past few months, the Outreach team has fine-tuned its approach to community and stakeholder meetings during the COVID-19 pandemic. All meetings with residents, business owners, and key stakeholders have become virtual, and outreach is being conducted primarily through electronic means. In addition, postcards and flyers continue to be used to alert the community to major activities, with canvassers wearing masks and gloves. These methods combined allow the team to continue being flexible and nimble with notifications despite COVID-19 concerns.

The team has conducted ten virtual community meetings this year with more than 2,200 people participating live or viewing recordings, which are accessible via the Project website and posted on OCTA's YouTube channel. The reach of these meetings is more than four times that of traditional neighborhood meetings. In addition, the cost per participant is lower, as labor and other direct costs are reduced for virtual meetings. In the last three months, the meetings have focused on activities at the Bolsa Chica Road, Goldenwest Street, Edwards Street, and McFadden Avenue bridges, and at the Heil Avenue pedestrian overcrossing. To date, more than 1,100 participants either joined those meetings live or have viewed the recordings.

The Project is marking a major milestone in late September, with the anticipated opening of the McFadden Avenue bridge. The Outreach team is coordinating a unique event to celebrate the opening. The event will be a compilation of recorded interviews with local business owners, Project partners, and elected officials on the importance of the opening, as well as footage of bridge construction. The video, with versions in Spanish and Vietnamese, will be broadcast via Facebook Live on the morning of the bridge opening.

Meanwhile, the team anticipates conducting at least three additional virtual neighborhood meetings in the next several months to notify communities of the completion of bridge work at Bushard Street, the start of bridge work at Brookhurst Street and Edinger Avenue, and the next phase of bridge activities at Westminster Boulevard. The team also will continue to meet with key stakeholders, such as emergency responders, on a quarterly basis, and coordinate with community partners, such as school districts, in navigating the process of returning students to schools within the Project corridor.

Constituent comments and questions have increased over the last three months, averaging approximately 180 per month, up from about 130 per month earlier in the year. An average of 13 construction alerts are sent out each month to more than 10,000 recipients. In addition, the Outreach team has expanded its toolkit, adding location-based advertising on mobile devices and tablets to engage constituents in specific geographic areas with short, relevant messages about upcoming activities.

Next Steps

Staff will continue to work closely with the design-builder to continue construction. This involves obtaining permits, utility relocation coordination, and coordinating construction activities.

Summary

Construction continues to advance. Currently, utility relocations, public outreach, and other activities are in process to continue the construction phase of the Project.

Attachment

None.

Prepared by:



Jeff Mills, P.E.
Senior Program Manager
(714) 560-5925

Approved by:



James G. Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646